

Swanson Reservoir

2011 Survey Summary



Nebraska Game and Parks Commission

Caleb Huber, Fisheries Biologist

Fish populations are sampled each fall at Swanson using gill nets, a method commonly used to sample fish found in open water, such as walleye, white bass, channel catfish and hybrid striped bass. Gill nets are set on approximately the same dates and locations each year to reduce variability and allow for trend comparisons of species abundance and size distributions. However, environmental factors can play a strong role in catch rate and composition

Swanson Reservoir continues to produce good numbers of walleye. In 2009, biologists caught 41 fish per net, 25 fish per net in 2010, and 27 fish per net in 2011. The 2011 sample had about an equal number of legal ($\geq 15"$) and sublegal fish ($<15"$). Recruitment seems to be fairly reliable which means that walleye populations should be good for the next few years. Increased water levels and the resulting submerged vegetation also provide good habitat for juvenile and adult fish of all species.

Channel catfish numbers are up from the 2010 survey. In 2010 biologists caught 2 fish per net and that number has increased to 6 in 2011. Swanson has been stocked with both channel catfish and blue catfish stockings on an alternating year basis. Blue catfish should do well at Swanson due to the warmer water temperature and has an abundant shad population. Blue cats are different from channel catfish in several ways. Blue catfish have a pronounced hump on their backs and a straight anal fin and lack spots like channel catfish. Channel catfish have a rounded anal, may or may not have spots, and lack a pronounced hump. Blue catfish are also able to grow to impressive size and will hopefully provide a unique fishery in Southwest Nebraska. Biologist caught a few blue cats in 2011 and those fish are already 12-14 inches long. Anglers are encouraged to practice catch-and-release for larger channel catfish, blue catfish, and flathead catfish due to their slow growth rates and trophy potential.

White bass numbers were down sharply in 2011. Biologists will monitor the population closely during the next season and take the appropriate management actions if the white bass numbers do not improve. Beginning in 2009, wipers stockings were suspended based on the data obtained by angler surveys which revealed very low demand for wipers. NGPC biologists will monitor the population and adjust the stocking rate of white bass and wipers as needed to maintain a fishable population but with more emphasis placed on white bass management.

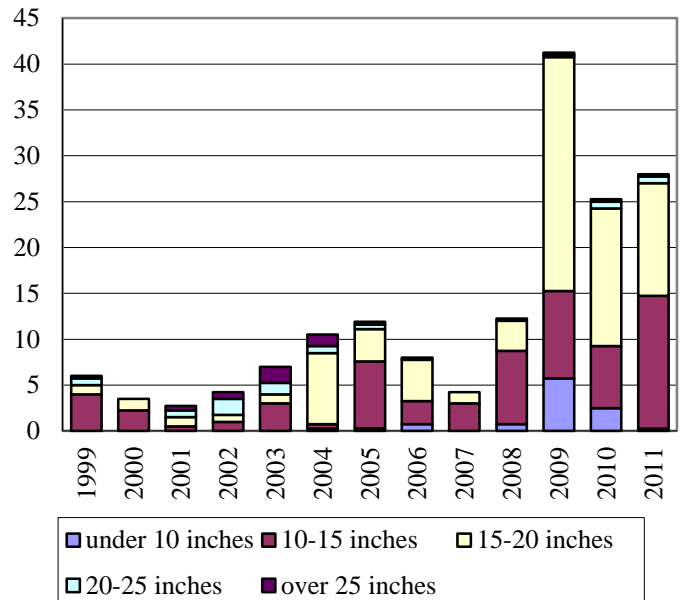
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are graphs illustrating water level elevations in Swanson Reservoir.

Walleye

Walleye numbers have been good at Swanson beginning in the 2009 season. In 2011 biologists sampled 27 fish per net which is a slight increase compared to the 2010 number. There are similar numbers of legal and sublegal fish which indicates that there should be good angling opportunities and lots of fish to take home in the coming years. 2012 should be another good walleye year.

Walleye are stocked annually at Swanson Reservoir due to poor natural recruitment. 3.4 million walleye fry were stocked in 2011 and 7.5 million fry are requested for 2012.

Catch Per Unit Effort

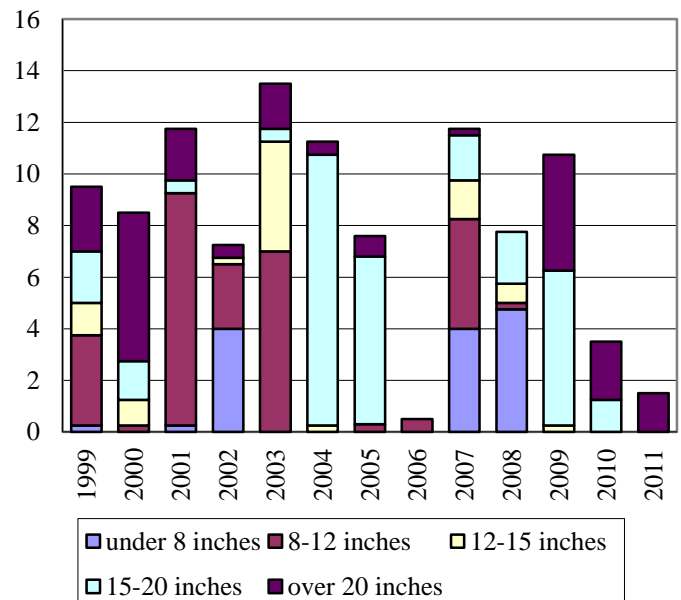


Wiper

Wiper numbers have been variable at Swanson for several years. Wiper stockings have been suspended at Swanson due to increased walleye and white bass catches and minimal angler effort as indicated by creel data. Wiper numbers are still declining but the outstanding walleye and white bass numbers provide good angling opportunity.

Wipers were last stocked in 2008. The future of wipers is undetermined at this time but wipers will most likely be stocked intermittently (every 3-5 years) in order to provide an occasional trophy opportunity.

Catch Per Unit Effort



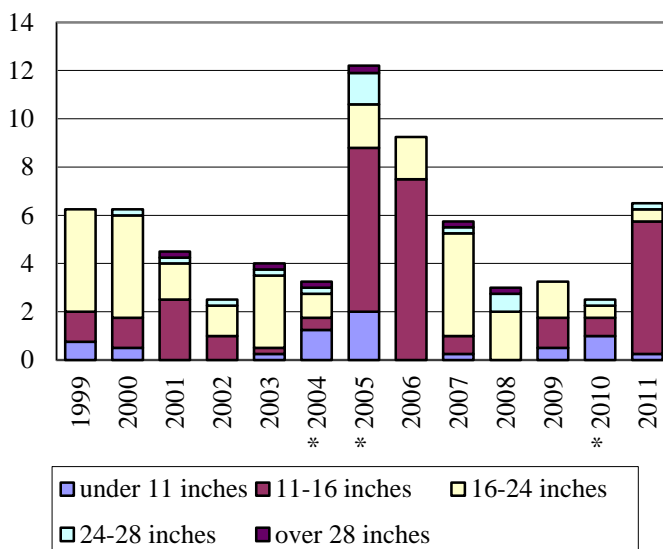
Channel Catfish

Channel catfish numbers increased greatly in 2011 due to a stocking in 2010. Currently those catfish are on the short side but will be filling live wells in just a couple years. Blue catfish are also being stocked regularly, if available in an attempt to create a trophy catfish opportunity. Catfish anglers need to be sure they positively identify catfish because regulations differ for channel and blue catfish.

As mentioned, catfish are stocked regularly due to poor recruitment in this reservoir. Channel catfish were stocked in 2004 (11,800), 2005 (11,690), and 2010 (15,756). Blue catfish were stocked in 2008 (29,972), 2009 (16,452), and 2011 (9,985). There are 18,840 channel catfish requested for 2012.

* Indicates stocking year

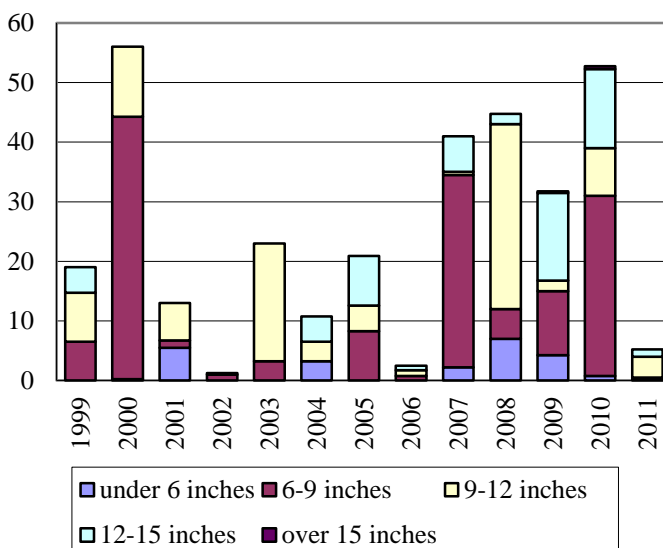
Channel Catfish Catch Per Unit Effort

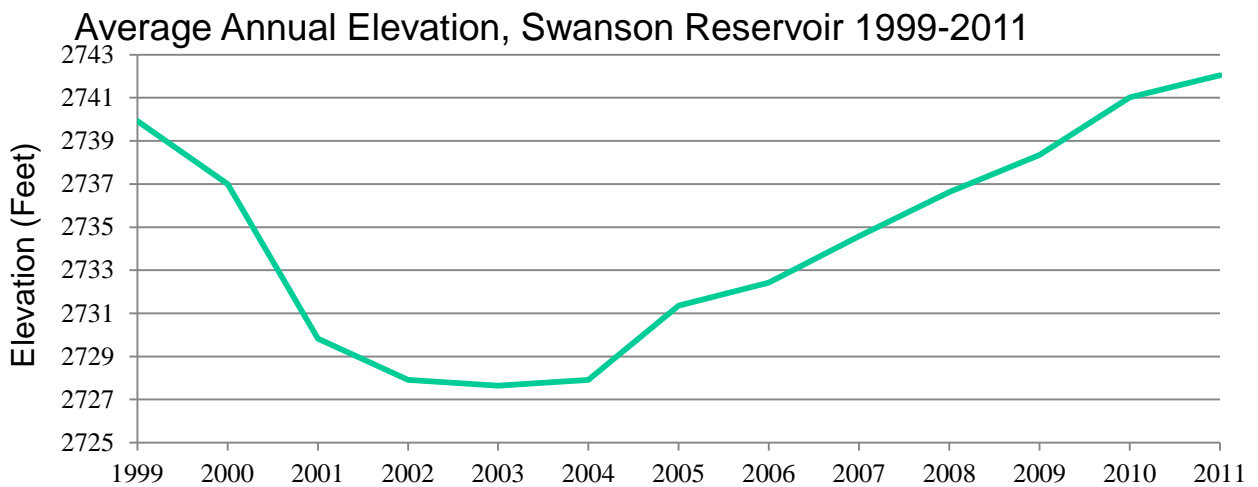


White Bass

The 2011 white bass sample was down sharply to 5 fish per net. Although numbers were low the fish sampled were on the big side (9-15 inches). Biologists are unsure what has caused the sharp decline and will monitor the fish numbers and if necessary supplemental stocking will be requested. Historically white bass stockings have not been necessary as white bass have not been stocked in over ten years. There are no white bass requested for 2012.

White Bass Catch Per Unit Effort



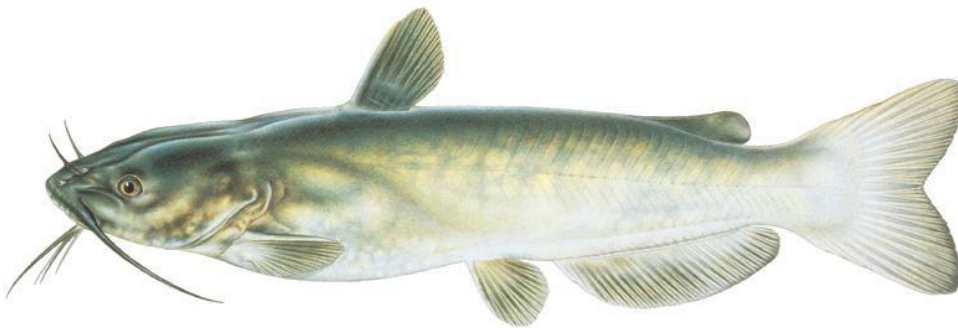


Water levels at Swanson have been recovering since the low water even beginning in 2001. This recovery has provided many acres of submerged cover which has made shoreline angling and access a little difficult. However the recovery is the primary reason for fishery improvements at Swanson.



Blue Catfish

Description: A scaleless, bluish-silver fish having no dark spots, an adipose fin, 8 barbels that are used to locate food, and a deeply forked tail. Its anal fin has more than 30 rays with a straight margin. No length limit, 1 fish daily bag limit.



Channel Catfish

Description: An olive-brown or slate-blue, scaleless fish having dark spots (especially on small fish), an adipose fin, 8 barbels that are used to locate food, and a deeply forked tail. Its anal fin has 24-29 rays with a rounded margin. Breeding males become dark blue and are often misidentified as a blue catfish. No length limit, 5 fish daily bag limit